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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,894	10/08/2004	Kenneth Lee Perduc	PU020113	2481
24498 7590 09/20/2007 JOSEPH J. LAKS, VICE PRESIDENT THOMSON LICENSING LLC PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312			EXAMINER FLORES, LEON	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	Application No. 10/510,894	Applicant(s) PERDUE, KENNETH LEE	
	Examiner Leon Flores	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/12/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/20/2007 have been fully considered but they are not persuasive.

Response to Remarks

Applicant asserts that, "*Sgambati also fails to teach or suggest inhibiting signal transmission to thereby prevent a given circuit from generating an interrupt signal*".

The examiner respectfully disagrees. The reference of Sgambati does teach that, "the infrared signals received at infrared receiver/demodulator are generated, for example, by a remote unit control unit operated by the demonstrator. In this mode of operation controller 10 simply serves as a repeater to provide for retransmission of the signals received at receiver/demodulator 44 at infrared transmitter 40 and 42", as recited in col. 3, lines 40-47.

Furthermore, as recited in col. 4, lines 12-16, "it is desirable to disable the controller's repeater mode of operation during the initialization of the demonstration to avoid interference". Subsequently, in col. 5, lines 9-11, "in some instances, it is desirable for the demonstration to operate continuously until interrupted by commands received by infrared receiver/demodulator".

In conclusion, the controller's primary function is to serve as a repeater for retransmission of signals received via the infrared receiver, and to also inhibit signals received via the infrared receiver when the disabling the repeater function, thus, preventing interrupts signals.

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Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims (1-2, and 4-20) are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (hereinafter Prior art) in view of Sgambati. (US Patent 5,606,443) for the same reasons as set forth in the previous office action.**

Re claim 1, Prior art discloses a circuit arrangement comprising: a first circuit having an output line and an input line (See fig. 1: 12); a second circuit having an input line for receiving signals from the output line of the first circuit, and an output line for transmitting signals to the input line of the first circuit (See fig. 1: 10).

But Prior art fails to teach a control circuit for inhibiting the signals transmitted from the output line of the second circuit to the input line of the first circuit when the first

circuit is transmitting signals to the input line of the second circuit and thereby preventing the first circuit from generating an interrupt signal.

However, Sgambati does. (See fig. 1: 10 & fig. 4A & B, col. 6, lines 15-35) Sgambati discloses a controller for controlling signals received by the IR receiver to be sent to the IR transmitter. This is accomplished by an output line which enables or disable the repeater function of the controller. When the output line is logic 1 (high state) signals received through a jack (146), signals received by the IR receiver and which are sent by the IR receiver to the controller, are inhibited from passage through NOR gate.

Therefore, taking the combined teachings of Prior art and Sgambati as a whole. It would have been obvious to one of ordinary skill in the art to have incorporated a controller into the system of applicant's admitted prior art, in the manner as claimed, and as taught by Sgambati, for the benefit of enabling/disabling the repeater function (retransmission) of the controller. (See col. 6, lines 29-30 & col. 9, lines 23-28)

Re claim 2, the combination of Prior art and Sgambati further disclose that wherein the circuit arrangement is included in a television receiver. (In Sgambati, see fig. 1 & col. 3, lines 31-40. Furthermore, this circuit arrangement has been used in the ATC311 high definition televisions as disclosed by the applicant in paragraph 17.)

Re claim 4, the combination of Prior art and Sgambati further disclose that, wherein the control circuit keeps the input line of the first circuit at a high state when the

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first circuit is transmitting signals to the input line of the second circuit. (In Sgambati, see fig. 1. One skilled in the art would know that the input line of the first circuit must be kept high state (logic 1) when transmitting to the IR receiver, that way no signal are inputted to the first circuit.)

Re claim 5, the combination of Prior art and Sgambati further disclose that wherein the first circuit is a selected one of Universal Asynchronous Receiver/Transmitter (UART) and a Universal Synchronous/Asynchronous Receiver/Transmitter (USART). (In Prior art, see fig. 1)

Re claim 6, the combination of Prior art and Sgambati further disclose that, wherein the second circuit is a G-Link circuit. (In Prior art, see fig. 1)

Re claim 7, the combination of Prior art and Sgambati further disclose that wherein the second circuit further comprises a bi-directional line. (In Prior art, see fig. 1)

Re claim 8, the combination of Prior art and Sgambati further disclose that, wherein short-circuiting the bidirectional line initiates a demonstration mode. (In Prior art, see fig. 1 & paragraph 5. One skilled in the art would know that short-circuiting would cause the initiation of a demonstration mode.)

Re claim 9, the combination of Prior art and Sgambati further disclose that wherein the shorting circuiting is a short circuit to ground. (One skilled in the art would know that shorting the circuit to ground is one way short circuiting is accomplished.)

Re claim 10, the combination of Prior art and Sgambati further disclose that wherein the control circuit inhibits the signals transmitted from the output line of the second circuit to the input line of the first circuit when the first circuit is transmitting signals to the input line of the second circuit during a first mode of operation and allows the second circuit to transmit signals to the first circuit during a second mode of operation. (In Sgambati, see col. 4, lines 12-16 & (See fig. 1: 10 & fig. 4A & B, col. 6, lines 15-35)

Re claim 11, the combination of Prior art and Sgambati further disclose that, wherein signals transmitted from the output line of the first circuit control an external pager module through the second circuit for connecting to a pager service. (In applicant's admitted prior art, see paragraphs 4-5. One skilled in the art would know that G-link circuits can be connected to control external pager module. Furthermore, this circuit arrangement has been used in the ATC311 high definition televisions as disclosed by the applicant in paragraph 17.)

Re claim 12, the combination of Prior art and Sgambati further disclose that, wherein the second circuit further comprises a second input line for receiving IR signals

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transmitted from an IR source and a second output line for transmitting the IR signals for remotely controlling an external device. (In Prior art, see paragraphs 4-5)

Re claim 13, the combination of Prior art and Sgambati further disclose that, wherein the second circuit provides feedback between the output line of the first circuit and the input line of the first circuit. (In Prior art, see paragraphs 4-5)

Re claim 14, the combination of Prior art and Sgambati further disclose that wherein the control circuit inhibits the signals transmitted from the output line of the second circuit to the input line of the first circuit according to a mode of operation. (In Sgambati, see fig. 1:10 & fig. 4A & B, col. 6, lines 15-35.)

Claim 15 is a method claim corresponding to system claim 1. Hence, the elements in system claim 1 would have necessitated the steps performed in method claim 15. Therefore, claim 15 has been analyzed and rejected w/r to claim 1 above.

Claim 16 is a method claim corresponding to system claim 5. Hence, the elements in system claim 5 would have necessitated the steps performed in method claim 16. Therefore, claim 16 has been analyzed and rejected w/r to claim 5 above.

Claim 17 is a method claim corresponding to system claim 6. Hence, the elements in system claim 6 would have necessitated the steps performed in method

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claim 17. Therefore, claim 17 has been analyzed and rejected w/r to claim 6 above.

Claim 18 is a method claim corresponding to system claim 7. Hence, the elements in system claim 7 would have necessitated the steps performed in method claim 18. Therefore, claim 18 has been analyzed and rejected w/r to claim 7 above.

Claim 19 is a method claim corresponding to system claim 8. Hence, the elements in system claim 8 would have necessitated the steps performed in method claim 19. Therefore, claim 19 has been analyzed and rejected w/r to claim 8 above.

Claim 20 is a method claim corresponding to system claim 9. Hence, the elements in system claim 9 would have necessitated the steps performed in method claim 20. Therefore, claim 20 has been analyzed and rejected w/r to claim 9 above.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon Flores whose telephone number is 571-270-1201. The examiner can normally be reached on Mon-Fri 7-5pm Alternate Fridays off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LF

September 14, 2007


DAVID C. PAYNE
SUPERVISORY PATENT EXAMINER